

TI-Nspire Technology Lesson



Unit 8: Verifying the Angle Properties

On your calculator, press  > **7: My Documents**, then open file **u08_413**.

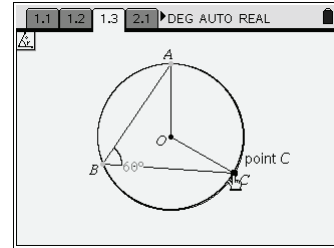
Verifying the Property of Inscribed and Central Angles

On page 1.3, point O is the centre of the circle.

1. Measure the inscribed and central angles.

- Press , then select **7: Measurement > 4: Angle**.
- Click on points A, B, and C in order to construct $\angle ABC$.
- Click on points A, O, and C in order to construct $\angle AOC$.
- Press .

What do you notice?



2. Drag point B along major arc AC.
Does the measure of $\angle ABC$ change?

3. Drag point A or C around the circle, making sure $\angle ABC$ and $\angle AOC$ always subtend the same minor arc AC.
What do you notice about the angle measure relationship?
What property does this verify?

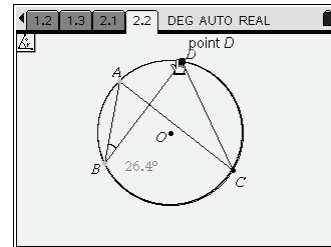
Verifying the Property of Inscribed Angles Subtended by the Same Arc

On page 2.2, point O is the centre of the circle.

1. Measure $\angle ABD$ and $\angle ACD$.

- Press **menu**, then select **7: Measurement > 4: Angle**.
- Click on points A, B, and D in order to construct $\angle ABD$.
- Click on points A, C, and D in order to construct $\angle ACD$.
- Press **esc**.

What do you notice?



2. Drag the point C along major arc AD.
What do you notice about the angle measures?
What property does this verify?